

Effect of exercise in water on the musculoskeletal pain in pregnant women: a randomized controlled trial

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Abstract

Background: Musculoskeletal disorders have been a major cause of disability in pregnant women. The aim of this study is to determine the effect of exercise in an aquatic environment on the musculoskeletal pain among pregnant women. Material and methods: This randomized clinical trial was conducted on 54 pregnant women aged 20-35 years. The subjects were divided into the intervention group and control groups. Women who were in 20 to 26 weeks of gestation were included in the study. The intervention was Water Exercise in Pregnancy program conducted from week 20 to week 34. The control group received standard prenatal care. Musculoskeletal complications were assessed using the Nordic questionnaires at the baseline and, 4th and 8th week of pregnancy. The intensity of pain was assessed using a visual analog scale in the two groups. Data were analyzed using descriptive and inferential statistics via the SPSS v.16. The lsmeans package was used to examine comparisons. Results: Results of the study showed that level of discomfort and musculoskeletal complications in the intervention group was significantly reduced during the 4th and 8th week of the study compared to the control group ($p < 0.001$). After the intervention, intensity of musculoskeletal pain in the intervention group showed a significant decrease compared to the control group ($p < 0.001$). Conclusion: Exercise in water during pregnancy can be effective to reduce musculoskeletal complications. Aquatic exercises should be developed in the exercise program for pregnant women with musculoskeletal pain. © 2021 World Scientific Publishing Company.

Author keywords

Musculoskeletal pain; Pregnancy; Water exercise